

Greenwich Mean Times of Superior and Inferior Geocentric Conjunctions of Jupiter's Fourth Satellite (Callisto) from 1892 November to the end of 1893.

(Communicated by the Superintendent of the "Nautical Almanac.")

Attention having been drawn to the matter by Mr. Freeman in the current number of the *Observatory*, the following times of geocentric conjunctions of what has hitherto been known as *Jupiter's* Fourth Satellite are communicated to the Society, in the hope that they may be useful to observers generally.

The conjunctions of which the times are here given are geocentric conjunctions with the centre of the planet in the plane of the orbit of the satellite.

Superior Conjunctions.								Inferior Conjunctions.							
1892.	d	h	m	1893.	d	h	m	1892.	d	h	m	1893.	d	h	m
Nov.	3	10	18.5	June	9	20	6.5	Nov.	11	19	32.2	June	18	7	55.9
	20	1	13.0		26	16	37.0		28	10	56.4	July	5	4	12.5
Dec.	6	17	5.8	July	13	12	43.3	Dec.	15	3	20.4		22	0	0.6
	23	10	3.1		30	8	17.0		31	20	47.5	Aug.	7	19	12.4
1893.								1893.							
Jan.	9	4	2.1	Aug.	16	3	9.1	Jan.	17	15	13.5		24	13	37.9
	25	22	55.6	Sept.	1	21	11.9	Feb.	3	10	28.1	Sept.	10	7	9.5
Feb.	11	18	33.8		18	14	16.2		20	6	22.0		26	23	41.5
	28	14	45.7	Oct.	5	6	18.5	Mar.	9	2	45.5	Oct.	13	15	12.7
Mar.	17	11	22.1		21	21	22.7		25	23	28.9		30	5	52.5
Apr.	3	8	15.3	Nov.	7	11	42.2	Apr.	11	20	24.7	Nov.	15	20	1.4
	20	5	16.5		24	1	43.6		28	17	26.3	Dec.	2	10	7.3
May	7	2	19.5	Dec.	10	15	58.2	May	15	14	25.6		19	0	39.8
	23	23	18.7		27	6	53.1	June	1	11	17.4	1894.			
												Jan.	4	16	2.4

Nautical Almanac Office:
1892 October 5.

Observations of Phenomena of Jupiter's Satellites at Windsor, New South Wales, in the Year 1891.
By John Tebbutt.

Day of Obs. 1891.	Satellite.	Phenomenon.	Phase.	Aperture of Telescope.	Mag. Power.	Greenwich Mean Time of Observation. h m s	Mean Time of Nautical Almanac. h m s
Aug. 20	III.	Tr. Egr.	Int. contact	8-inch	95	0 53 1	
20	III.	"	Bisection	"	"	0 57 6	1 2
20	III.	"	Ext. contact	"	"	1 1 20	
Sept. 2	II.	Ecl. D.	Last seen	"	170	23 59 53	23 59 39
3	I.	Tr. Egr.	Int. contact	"	"	0 32 8	
3	I.	"	Bisection	"	"	0 33 38	0 35
3	I.	"	Ext. contact	"	"	0 34 57	
10		Occ. D.	First contact	4½-inch	120	21 14 18	21 16
10	I.	"	Bisection	"	"	21 16 47	
10	I.	Ecl. R.	First seen	8-inch	170	23 41 1	23 40 58
11	I.	Tr. Egr.	Bisection	4½-inch	180	20 42 33	
11	I.	"	Ext. contact	"	"	20 45 3	20 44
11	Shd. I.	"	Int. contact	"	"	20 50 12	
11	Shd. I.	"	Bisection	"	"	20 52 12	20 55
11	Shd. I.	"	Ext. contact	"	"	20 52 57	